



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/869,275	06/04/97	WITTMER	C T8616.CIP5

020451  
GRANT R CLAYTON  
THORPE NORTH WESTERN  
P O BOX 1219  
SANDY UT 84091-1219

HM32/1231

EXAMINER

MARSCHER, A

ART UNIT

PAPER NUMBER

1634

DATE MAILED:

12/31/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
08/869,275

Applicant(s)  
Wittmer et al.

Examiner  
Ardin Marschel

Group Art Unit  
1634



☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-117 is/are pending in the application.

Of the above, claim(s) 1-12, 36-54, 60-78, 83-86, and 93-117 is/are withdrawn from consideration.

☒ Claim(s) 82 and 87-92 is/are allowed.

☒ Claim(s) 13-18, 20-35, 55-59, and 79 is/are rejected.

☒ Claim(s) 19, 80, and 81 is/are objected to.

☒ Claims 1-117 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). (1 sheet)

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-12, 36-48, 60-65, and 108-117; drawn to thermal cycling methods, classified in Class 435, subclass 173.1.

II. Claims 13-35, 55-59, 79-82, and 87-92; drawn to systems or devices, classified in Class 422, subclass 68.1.

III. Claims 49-54, drawn to containers, classified in Class 422, subclass 50.

IV. Claims 66-78 and 83-86, drawn to carosels, classified in Class 422, subclass 209.

V. Claims 93-103, drawn to liquid addition methods, classified in Class 422, subclass 236.

VI. Claims 104-107, drawn to probe systems, classified in Class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

The methods, systems, containers, carosels, and liquid addition methods, and probe systems of Groups I-VI each are generic in their mechanical or manipulative or heating limitations such that a multitude of possible chemical, biological, or enzymatic reactions can be practiced therewith. For example, the thermal cycling methods of Group I may be utilized in either PCR as practiced the systems of Group II but Group I does not require any relationship to the thermal cycling that requires PCR temperatures thus resulting in a serious search

burden if examined together because a multitude of reactions utilize thermal cycling such as, for example, treatment of metals for various tensile characteristic results. This same lack of required connection between the various groups as listed above documents the added serious search burden if any Group is examined with any other Group thus supporting this restriction requirement.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with John Breem on 6/26/98 a provisional election was made without traverse to prosecute the invention of Group II (claims 13-35, 55-59, 79-82, and 87-92). Affirmation of this election must be made by applicant in responding to this Office action. Claims 1-12, 36-54, 60-78, 83-86, and 93-117 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in

compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Enclosed is one sheet of PTO Form 1449 which has been executed due to the presence of copies of the references listed thereon. Unfortunately, another IDS was filed 3/30/98 without any copies of the references listed thereon found with the instant file. This 7 page IDS, therefore, has not been executed at this time.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 13-18, 20-35, 55-59, and 79 are rejected under 35 U.S.C. § 102(a) and (e) as being clearly anticipated by Heller et

al.(P/N 5,632,957).

Heller et al. taken as a whole discloses a PCR/diagnostic system in the abstract and pictorially in Figures 1 and 6 that reads on the instant claims as including heating and cooling for PCR with detection of the product wherein the system is implemented on a microchip thus analyzing samples well smaller than 1 ml as instantly claimed. Optical detection via various filters, waveguides, etc. are summarized in column 6, lines 27-53. These device limitations read on the instant claims.

Claims 19, 80, and 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 82 and 87-92 are allowed.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

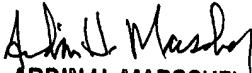
Serial No. 08/869,275

- 6 -

Art Unit: 1634

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

December 21, 1998

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER